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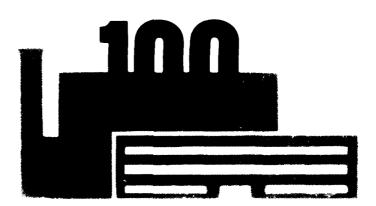




## 100 COMPANIES

RECEIVING THE LARGEST DOLLAR VOLUME OF PRIME CONTRACT AWARDS

Fiscal Year 1991



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### **FOREWORD**

100 Companies Receiving the Largest Dollar Volume of Prime Contract Awards is published annually. This report contains summary data on the 100 companies, including their subsidiaries, which were awarded the largest total dollar volume of Department of Defense prime contract awards during Fiscal Year 1991.

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### INTRODUCTION

This report presents summary data on the 100 companies and their subsidiaries receiving the largest dollar volume of Department of Defense (DoD) prime contract awards during Fiscal Year (FY) 1991. Table 1, (page 7) lists the 100 companies in alphabetical order and gives their associated rank. Table 2 (page 9) identifies the parent companies in rank order, with their subsidiaries, and gives the total net value of awards for both the parent company and its subsidiaries. In many cases the parent company receives no awards itself but appears on the list because of its subsidiaries. Table 2 also shows what percent of the total awards each company's awards represent as well as the cumulative percent represented by all companies.

### **NOTES ON COVERAGE**

Data in this report reflect the net value of both debit and credit procurement actions over \$25,000; e.g. the value of a terminated contract or other downward adjustment to a contract is deducted from a firm's total award amount, while modifications and other positive adjustments are treated as increases. Procurement actions include definitive contracts, the obligated portions of letter contracts, job orders, task orders, delivery orders, and any other orders against existing contracts. Research and development, services, construction, and supply and equipment contracts, worldwide, are included.

The report does not include those parts of indefinite quantity contracts that have not been translated into specific orders to business firms, or those contracts that have not yet become mutually binding agreements between the government and the company. The company totals do not include contracts made by other U.S. Government agencies and financed with Department of Defense funds or contracts awarded in foreign nations through their respective governments.

DATA RELATING TO COMPANIES IN THIS PUBLICATION ARE SUBJECT TO THE ACCURACY OF THE DUN & BRADSTREET CORPORATION'S DATA UNIVERSAL NUMBERING SYSTEM AND ITS ABILITY TO DESCRIBE RELATIONSHIPS OF COMPANIES.

### **HIGHLIGHTS**

Department of Defense prime contract awards over \$25,000 totaled \$136.7 billion during FY 1991, \$5.9 billion more than in FY 1990. The 100 firms and their subsidiaries receiving the largest amount of DoD contracts in FY 1991 received \$85.0 billion or 62.2 percent of this amount, primarily for aircraft, missile/space systems, ships, and electronics & communications equipment. In FY 1990 the top 100 companies received \$86.7 billion or 66.3 percent of all awards.

Exhibit A below shows that the first five companies received 21.4 percent of the total received by all companies in FY 1991, compared with 21.6 percent during FY 1990. The company ranked as number one during FY 1991, McDonnell Douglas Corp., also ranked as number one last year with awards of \$8.1 billion during FY 1991 as compared with \$8.2 billion last year. The smallest total amount received by a company in the FY 1991 Table 2 was \$142 million, compared to \$119 million in FY 1990.

**Exhibit A** 

COMPANY	Percent of Total									
POSITION	FY 1991	FY 1990	FY 1989	FY 1988						
1st 2nd 3rd 4th 5th	5.9% 5.7 3.6 3.2 3.0	6.3% 4.8 4.3 3.1 3.1	6.7% 5.3 4.5 2.9 2.9	5.8% 4.8 4.1 3.7 3.0						
TOTAL 1-5	21.4	21.6	22.3	21.4						
6-10 11-25	10.1 13.3	11.5 15.9	12.2 15.1	12.6 15.7						
TOTAL 1-25	44.9	49.0	49.6	49.7						
26-50 51-75 76-100 TOTAL 1-100	9.3 4.9 3.1 62.2%	9.8 4.6 2.9 ——— 66.3%	9.4 4.7 2.7 66.4%	8.5 4.7 2.9 65.8%						

## Changes in the Top 100 Companies, FY 1990 To FY 1991

Twenty four companies which did not appear on the list last year are among the top 100 companies this year. (See Exhibit B below.) Of these, one appears in position 25, one in position 55, and the balance between 62 and 100. The companies which appeared on the FY 1990 list which did not appear on this year's list are also shown in Exhibit B. Companies are considered as appearing on the list in both years despite mergers, acquisitions, divestitures, and name changes if a major component of a newly constituted company or the newly constituted company itself made the list as a component of a company in the top 100 in the prior year.

### Exhibit B

## Companies Listed in FY 1991 But not in FY 1990

## Companies Listed in FY 1990 But not in FY 1991

Alliant Techsystems, Inc. 1/ American President Companies, Ltd. American Trans Air Kalitta JV **Bahrain National Oil Bell Boeing JV** Boeing Co., & Silorsky Aircraft JV Booz Allen & Hamilton Caltex Petroleum Corp. Carlyle Group 4/ DuPont E.I. Demours & Co. EG&G, Inc. Esco Electronics Corp. 3/ Halliburton Co. Hensel Phelps Construction Co. Motor Oil Hellas Corinth Refining National Steel & Shipbuilding Co. Norfolk Shipbuilding & Drydock Corp. Shore Management, Inc. Ssangyong Oil Refining Co., Ltd Sun Company, Inc. Trinity Industries, Inc. Unaka Co., Ltd United Industrial Corp. Vinnell Corp.

Arvin Industries, Inc. **Bollinger Machine Shop & Shipyard** Bolt Beranek & Newman, Inc. Contel Corp. 2/ Control Data Corp. Crowley Maritime Corp. CRS Sirrine Metcalf & Eddy JV Day & Zimmerman, Inc. Digital Equipment Corp. Duchossois Enterprises, Inc. Eastman Kodak Co. Emerson Electric Co. 3/ Ford Motor Co. 4/ Forstmann Little & Co. Goodyear Tire & Rubber Co., The Hewlett Packard Co. International Marine Carriers McDonnell Douglas Gen. Dynamics JV Morrison Knudson Corp. Peterson Builders, Inc. Philip Morris Companies, Inc. Ram Systems GMBH Talley Industries, Inc. Varian Associates Inc.

- 1/ Honeywell, Inc. sold the Defense Systems Group, Signal Analysis Center, Test Instrument division and Marine Systems Division to Alliant Techsystems, Inc.
- 2/ Contel Corp. acquired by GTE Corp.
- 3/ Emerson Electric Co., sold Electronics & Space Corp., Hazeltine Corp., Rantec Microwave & Electronics Corp., Southwest Mobile Systems, & Vacco Industries, Inc., to ESCO Electronics Corp.
- 4/ Ford Aerospace Corp. acquired by Loral Corp., Loral sold BDM Corp., which was part of Ford Aerospace, to Carlyle Group.

Two other major changes during this year was the acquisition of NCR Corp., by American Telephone & Telegraph Corp., and the name change of Banner Industries to Fairchild Corp.

## Primary Procurement Categories of the Top 100 Companies

Although the contract work of many companies on the list includes more than one procurement category, each company has been assigned in Exhibit C (below) to the procurement category that accounts for its largest dollar volume of DoD awards; for example, General Electric Co. is a multi-industry company producing electronic and communications equipment and industrial and consumer products. For this exhibit, it has been assigned to "Aircraft", the procurement category accounting for its largest dollar volume of DoD contract awards.

**Exhibit C** 

Procurement	Number of Companies								
Category	FY 1991	FY 1990	Change						
Aircraft Missiles Ships Tank-Automotive Ammunition Electronics Services Construction Petroleum Weapons Subsistence All Other	18 12 7 3 4 18 21 2 13 0	16 11 8 4 8 25 17 0 8 1	+2 +1 -1 -1 -4 -7 +4 +2 +5 -1 0						

### Top 10 Companies

The top 10 companies during FY 1991 are listed in Exhibit D by rank, along with its FY 1990 rank and the dollar value of the awards it received in both FY 1991 and FY 1990. Exhibit E (page 5) describes the major products of these 10 companies.

Exhibit D

RA	NK	COMPANY NAME	AWA (In Bill	
1991	1990		1991	1990
1 2 3 4 5 6 7 8 9	1 2 3 4 5 26 8 7 6 9	McDonnell Douglas Corp. General Dynamics Corp. General Electric Co. General Motors Corp. Raytheon Co. Northrop Corp. United Technologies Corp. Martin Marietta Corp. Lockheed Corp. Grumman Corp.	\$8.1 7.9 4.9 4.4 4.1 3.3 2.8 2.7 2.7 2.4	\$8.2 6.3 5.6 4.1 7 2.9 3.5 3.6 2.7

### Exhibit E

### **COMPANY**

### **MAJOR PRODUCTS**

1. McDonnell Douglas Corp.

F-15 EAGLE, F-18 HORNET, C-17 cargo transport, AV-8 HARRIER, T-45 GOSHAWK, and AH-64 APACHE aircraft. TOMAHAWK and HARPOON missile systems.

2. General Dynamics Corp.

F-16 FALCON fighter aircraft. Nuclear submarines. M-1 tank. TOMAHAWK, STINGER and RIM-66 missiles. MK-15 close-in weapon system. Marine charter.

3. General Electric Co.

TOW, AEGIS and TRIDENT missile system components.
T-700 and F-110 engines.
Nuclear reactors for submarines.
Underwater sound equipment.
RDT&E for missile/space systems, ships, aircraft, and electronics/communication equipment.

4. General Motors Corp.

AMRAAM, TOW, TRIDENT, and MAVERICK missile systems.
Components MK-48 torpedo.
Vehicular power transmission components for M-1 Tank.
Construction of electronics/communication facility.
Miscellaneous Electronics/communications equipment.

5. Raytheon Co.

PATRIOT, AMRAAM, MAVERICK, TRIDENT, and HAWK missile systems and components. Miscellaneous Fire Control equipment.

RDT&E for electronics/communication equipment and missile/space systems. Underwater sound equipment.

### Exhibit E (Concluded)

### **COMPANY**

### **MAJOR PRODUCTS**

3. Northrop Corp.

B-2 STEALTH, Advanced Tactical Fighter, and F-15 EAGLE aircraft. Various electronics/communciations equipment.

RDT&E for electronics/communcations equipment, and missile/space systems.

7. United Technologies Corp.

F-100, TF-30, and TF-33 aircraft engines. UH-60 BLACKHAWK, SH-60 SEAHAWK, and CH-53 SEA STALLION helicopters. RDT&E and M/R of aircraft.

B. Martin Marietta Corp.

RDT&E for TITAN missile system.

A-64 APACHE aircraft equipment and other miscellaneous aircraft accessories and components.

Operation of ammunition facility.

9. Lockheed Corp.

TRIDENT missile system, Advanced Tactical Fighter, C-130 HERCULES, C-141 STARLIFTER, and C-5 GALAXY aircraft.

RDT&E for missile/space systems, aircraft, and electronics/communication equipment.

10. Grumman Corp.

F-14 TOMCAT, E-2 HAWKEYE, and EA6B PROWLER aircraft. RDT&E for aircraft, missile/space systems, and electronics/communications equipment. M&R of A-6 INTRUDER aircraft.

# TABLE 1 INDEX OF 100 PARENT COMPANIES WHICH RECEIVED THE LARGEST DOLLAR VOLUME OF PRIME CONTRACT AWARDS

R	TIOCAL	R	1 1991
			DADENM
λ	PARENT	λ	PARENT
N	COMPANY	N	COMPANY
K		K	
46	AEROSPACE CORPORATION	27	INTERNATIONAL BUS MCHS CORP
25	ALLIANT TECHSYSTEMS INC	87	INTERNATIONAL SHIPHOLDING CORP
29	ALLIED SIGNAL INC	22	ITT CORPORATION
84	AMERADA HESS CORPORATION	44	JOHNS HOPKINS UNIVERSITY
93	AMERICAN PRESIDENT CMPNIES LTD	59	JOHNSON CONTROLS INC
28	AMERICAN TELEPHONE & TELG CO	70	KAMAN CORPORATION
69	AMERICAN TRANS AIR KALITTA JV	13	LITTON INDUSTRIES INC
65	AMOCO CORPORATION	9	LOCKHEED CORPORATION
40	ARCO PRODUCTS COMPANY	96	LOGICON INC
73	ASTRONAUTICS CORP OF AMERICA	16	LORAL CORPORATION
53	AVONDALE INDUSTRIES INC	17	LTV CORPORATION
67	BAHRAIN NATIONAL OIL	8	MARTIN MARIETTA CORPORATION
23	BATH HOLDING CORPORATION	45	MASSACHSTTS INST OF TCHNOLOGY
76	BELL BOEING JV	1	MCDONNELL DOUGLAS CORPORATION
79	BLAUK & DECKER CORPORATION	100	MIP INSTANDSETZUNGSBETRIC
63	BOEING CO & SIKORSKY ACFT JV	41	MITRE CORPORATION
18	BOEING COMPANY THE	64	MOBIL CORPORATION
75	BOOZ ALLEN & HAMILTON INC	74	MOTOR OILS HELLAS CORINTH REFI
97	CAE INDUSTRIES LTD	57	MOTOROLA INC
94	CALTEX PETROLEUM CORPORATION	78	NATIONAL STEEL & SHPBLDING CO
88	CARLYLE GROUP	99	NORFOLK SHPBLDING DRYDOCK CORP
56	CFM INTERNATIONAL INC	6	NORTHROP CORPORATION
66	CHEVRON CORPORATION	31	OLIN CORP
61	CHRYSLER CORPORATION	39	OSHKOSH TRUCK CORPORATION
48	COASTAL CORPORATION	54	PENN CENTRAL CORPORATION
43	COMPUTER SCIENCES CORPORATION	72	PHILIPS GLJEILAMPENFABRIEKEN
52	CSX CORPORATION	5	RAYTHEON COMPANY
91	DU PONT E I DE NEMOURS & CO	12	ROCKWELL INTERNATIONAL CORP
38	DYNCORP	68	ROLLS ROYCE PLC
32	E SYSTEMS INC	49	ROYAL DUTCH SHELL GROUP OF COS
90	EATON CORPORATION	36	SCIENCE APPLICATIONS INTL CORP
77	EG&G INC	82	SEQUA CORPORATION
55	ESCO ELECTRONICS CORPORATION	71	SHORE MANAGEMENT INC
33	EXXON CORPORATION	83	SSANGYONG OIL REFINING CO LTD
24	FED EX PAN AM NORTHWEST ET AL	92	SUN COMPANY INC
14	FMC CORPURATION	37	TELEDYNE INC
42	FOUNDATION HEALTH CORPORATION	51	TENNECO INC
34	GENCORP INC	51	TEXAS INSTRUMENTS INC
2	GENERAL DYNAMICS CORPORATION	20	TEXTRON INC
80	GENERAL ELECTRIC CO PLC THE	60	THIOKOL CORPORATION
3	GENERAL ELECTRIC COMPANY	89	TRACOR INC
4	GENERAL MOTORS CORPORATION	95	TRINITY INDUSTRIES INC
10	GRUMMAN CORPORATION	19	TRW INC
26	GTE CORPORATION	62	UNAKA COMPANY INCORPORATED
81	HALLIBURTON COMPANY	15	UNISYS CORPORATION
58	HARRIS CORPORATION	98	UNITED INDUSTRIAL CORPORATION
30	HARSCO CORPORATION	7	UNITED TECHNOLOGIES CORP
86	HENSEL PHELPS CONSTRUCTION CO	85	VINNELL CORPORATION
50	HERCULES INCORPORATED	11	WESTINGHOUSE ELECTRIC CORP
35	HONEYWELL INC	47	WORLD ROSEN KEY AMER ETAL JV
		ļ	
	L	L	

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
	TOTAL	136,640,307	100.00	100.00
	TOTAL, 100 COMPANIES/SUBSIDIARIES	84,963,299	62.18	62.18
1	MCDONNELL DOUGLAS CORPORATION DOUGLAS AIRCRAFT COMPANY MCDONNELL AIRCRAFT COMPANY MCDONNELL DOUGLAS ELECTRON SYS MCDONNELL DOUGLAS HELICOPTER MCDONNELL DOUGLAS MSL SYS CO MCDONNELL DOUGLAS SPACE SYS CO MCDONNELL DOUGLAS SYS INTEG CO MCDONNELL DOUGLAS TRNING SYS	5,226,540 1,353,668 383,637 29,162 446,908 57,288 522,355 2,657 35,09		
	TOTAL	8,057,307	5.89	5.89
2	GENERAL DYNAMICS CORPORATION BRAINTREE MARITIME CORPORATION CESSNA AIRCRAFT COMPANY	7,694,646 129,242 24,353		
	TOTAL	7,848,241	5.74	11.64
3	GENERAL ELECTRIC COMPANY CANADIAN GENERAL ELECTRIC CO ELANO CORPORATION GE MOBILE COMMUNICATIONS DIST GELCO CORPORATION GENERAL ELECTRIC GMBH & CO KG GENSTAR CONTAINER CORP MANAGEMENT & TECHNICAL SVCS CO REUTER STOKES CANADA LIMITED REUTER STOKES INC DEL TRANSPORT INTL POOL INC	4,845,879 1,299 1,610 14,823 365 75 67 1,802 115 94 359		
	TOTAL	4,866,488	3,56	15.20
4	GENERAL MOTORS CORPORATION  AMI INSTRUMENTS INC DELCO ELECTRONICS CORPORATION ELECTRONIC DATA SYSTEMS CORP G M HUGHES ELECTRONICS CORP GENERAL MOTORS OF CANADA LTD HUGHES AIRCRAFT COMPANY HUGHES DANBURY OPTICAL SYSTEMS HUGHES TRAINING SYS INC	1,353,540 38 9,194 445,594 6,697 593 2,547,123 42,151 22,239	2 24	10.44
	TOTAL	4,427,169	3.24	18.44

	FISCAL YEAR 1991									
R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL						
5	RAYTHEON COMPANY BEECH AEROSPACE SERVICES INC BEECH AIRCRAFT CORPORATION INDIANA BEECHCRAFT INC RAYTHEON MDTRN SSTMS CMPNY RAYTHEON SERVICE COMPANY RAYTHEON SUPPORT SERVICES CO RAYTHEON TECH ASST CO INC SWITCHCRAFT INC UNITED ENGINEERS & CONSTRS  TOTAL	3,705,026 168,244 45,889 396 199 53,113 23,966 303- 164 93,067	2.99	21.43						
6	NORTHROP CORPORATION NORTHROP WRLDWIDE AIRCRAFT SVC	3,243,235 75,980								
7	UNITED TECHNOLOGIES CORP  ADAPTIVE OPTICS ASSOCIATES CARRIER CORPORATION HAMILTON STANDARD ELECTRONICS INTERNATIONAL FUEL CELLS CORP NORDEN SYSTEMS INC OTIS ELEVATOR COMPANY SIKORSKY INTERNATIONAL PRODUCT UNITED TECHNOLOGIES AT HLDNGS USBI CO	2,763,489 718 1,480 13,305 513 38,860 140 5,709 220 700	2.42	23.86						
8	TOTAL  MARTIN MARIETTA CORPORATION  TORRANCE ADVANCED METALS CORP	2,825,134 2,683,270 5,936	2.06	25.93						
	TOTAL	2,689,206	1.96	27.89						
9	LOCKHEED CORPORATION LOCKHEED AEROMOD CENTER INC LOCKHEED AERONAUTICAL SYS CO LOCKHEED AEROPARTS INC LOCKHEED AIRCRAFT SERVICE CO LOCKHEED ENGINEERING & SCIENCE LOCKHEED MISSILES & SPACE CO LOCKHEED SANDERS INC LOCKHEED SPACE OPERATIONS CO LOCKHEED SUPPORT SYSTEMS INC LOCKHEED SYSTEMS COMPANY INC LOCKHEED SYSTEMS COMPANY INC LOCKHEED WESTERN EXPORT CO	182,230 37,390 494,760 470 63,906 8,484 1,510,639 269,960 1,064- 96,805 356 2,637 2,666,573	1.95	29.85						

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
10	GRUMMAN CORPORATION GRUMMAN AEROSPACE CORPORATION GRUMMAN DATA SYSTEMS CORP  TOTAL	2,293,181 70,298 2,363,479	1.72	31.58
11	WESTINGHOUSE ELECTRIC CORP PERCEPTICS CORPORATION SCIENTIFIC ECOLOGY GROUP INC SHAW WALKER CO T S C INC WESTINGHOUSE ENVIR GEO SER WESTINGHOUSE FURNITURE SYSTEMS XETRON CORPORATION TOTAL	1,786,954 75 42 1,090 7,520 355 13,028 2,600 1,811,664	1.32	32.90
12	ROCK WELL INTERNATIONAL CORP ALLEN BRADLEY COMPANY INC COLLINS INTERNATIONAL SVC CO ROCKWELL GRAPHIC SYSTEMS INC ROCKWELL POWER SYSTEMS  TOTAL	1,458,561 122 229,742 455 18,899	1.24	34.15
13	LITTON INDUSTRIES INC INGALLS SHIPBUILDING INC LITTON SYSTEMS INC MENUMASTER INC U S E C 0  TOTAL	2,701 990,053 605,229 40 2,931 1,600,954	1.17	35.32
14	FMC CORPORATION TOTAL	1,466,587 1,466,587	1.07	36.40
15	UNISYS CORPORATION TOTAL	1,378,865 1,378,865	1.00	37.41
16	LORAL CORPORATION LORAL ROLM MIL SPEC COMPUTERS TOTAL	1,280,260 2,658 1,282,918	0.93	38.34

PISCAL YEAR 1991										
COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL							
LTV CORPORATION  AM GENERAL CORPORATION LTV AEROSPACE & DEFENSE CO LTV ENERGY PRODUCTS CO  TOTAL	464 358,003 895,662 667 1,254,796	0.91	39.26							
BOEING COMPANY THE  ARGOSYSTEMS INC BOEING AEROSPACE & ELECTRONICS BOEING COMPUTER SUPPORT SVCS BOEING ELECTRONICS INC BOEING LOUISIANA INC U T L CORPORATION  TOTAL	669,483 5,683 435,755 42,542 225 11,476 1,285 1,166,449	0.85	40.12							
TRW INC ESL INCORPORATED TRW ELECTRONIC PRODUCTS INC TOTAL	958,175 132,266 1,922 1,092,363	0.79	40.92							
TEXTRON INC  ACE INDUSTRIES INC AIRFOIL TEXTRON AVCO CORPORATION AVCO RESEARCH LABORATORY INC BABCO TEXTRON INC BELL HELICOPTER INTERNATIONAL BELL HELICOPTER TEXTRON INC CADILLAC GAGE TEXTRON INC EX CELL O CORPORATION H R TEXTRON INC NORWOOD PRECISION PDTS TEXTRON	289,200 530 10,474 306,622 11,446 2,686 3,991- 344,075 20,671 1,233 13,897 74 996,917	0.72	41.65							
TEXAS INSTRUMENTS INC TEXAS INSTRUMENTS ASIA LTD TOTAL	973,929 8,149 982,078	0.71	42.36							
ITT CORPORATION  FELEC SERVICES INC  ITT BASE SERVICES INC  ITT FEDERAL SERVICES CORP  ITT GILFILLAN  SHERATON CORPORATION THE  TOTAL	679,477 90,586 9,964 157,722 9,728 45 947,522	0.69	43.06							
	COMPANIES  LTV CORPORATION AM GENERAL CORPORATION LTV AEROSPACE & DEFENSE CO LTV ENERGY PRODUCTS CO  TOTAL  BOEING COMPANY THE ARGOSYSTEMS INC BOEING AEROSPACE & ELECTRONICS BOEING COMPUTER SUPPORT SVCS BOEING ELECTRONICS INC BOEING LOUISIANA INC UT L CORPORATION  TOTAL  TRW INC ESL INCORPORATED TRW ELECTRONIC PRODUCTS INC  TOTAL  TEXTRON INC ACE INDUSTRIES INC AIRFOIL TEXTRON AVCO CORPORATION AVCO RESEARCH LABORATORY INC BABLO TEXTRON INC CADILLAC GAGE TEXTRON INC TOTAL  TEXAS INSTRUMENTS INC TOTAL  TEXAS INSTRUMENTS INC TOTAL  TEXAS INSTRUMENTS SINC TOTAL  ITT CORPORATION FELEC SERVICES INC ITT BEDERAL SERVICES CORP ITT GILFILLAN SHERATON CORPORATION THE	COMPANIES	COMPANIES							

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
23	BATH HOLDING CORPORATION BATH IRON WORKS CORPORATION	0 872,381		
	TOTAL	872,381	0.63	43.70
24	FED EX PAN AM NORTHWEST ET AL	828,585		
	TOTAL	828,585	0.60	44.30
25	ALLIANT TECHSYSTEMS INC	826,640		
	TOTAL	826,640	0.60	44.91
26 27	GTE CORPORATION  AG COMMUNICATION SYSTEMS CORP CONTEL CORPORATION CONTEL OF THE WEST INC GTE CALIFORNIA INC GTE CUSTOMER NETWORKS INC GTE GOVERNMENT SYSTEMS CORP GTE HAWAIIAN TELEPHONE CO GTE INTERNATIONAL INC GTE MOBILNET GTE NORTH INC GTE PRODUCTS CORP GTE SOUTH INCORPORATED GTE SPACENET CORPORATION GTE SYLVANIA COM PRODUCTS GTE TELECOM INC GTE TELECHONE OPERATIONS SW GTE VALENITE CORP	5,125 107 284,098 572 702 578 424,314 44,128 614 50 54 4,703 1,883 12,296 16,802 3,465 1,590 344 801,425	0.58	45.49
	TOTAL	773,363	0.56	46.06
28	AMERICAN TELEPHONE & TELG CO A T & T COMMUNICATIONS INC A T & T PARADYNE CORP NCR COMTEN INC NCR CORPORATION NCR JAPAN LTD WESTERN ELECTRIC SAUDI ARABIA  TOTAL	642,141 35,733 752 6,665 13,085 258 429 699,063	0.51	46.57
29	ALLIED SIGNAL INC ALLIED SIGNAL AEROSPACE CO	129,941 558,614		
	TOTAL	688,555	0.50	47.08

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
30	HARSCO CORPORATION	621,366		
	TOTAL	621,366	0.45	47.53
31	OLIN CORP  OLIN FABRICATED METAL PRODUCTS OLIN ORDNANCE OLIN WINCHESTER PACIFIC ELECTRO DYNAMICS INC PHYSICS INTERNATIONAL COMPANY ROCKET RESEARCH CO	136,407 4,656 449,292 11,149 1,795 11,932 460		
	TOTAL	615,691	0.45	47.98
32	E SYSTEMS INC HRB SYSTEMS INC SERV AIR INC	263,350 1,904 338,188	[ ] ]	
	TOTAL	603,442	0.44	48.42
33	EXXON CORPORATION  ESSO AG  ESSO NEDERLAND B V  ESSO STANDARD OIL SA LTD  EXXON COMPANY USA  TOTAL	195,661 2,145 23,196 1,051 327,017	0.40	48.82
	10171	543,070	0.40	70.02
34	GENCORP INC AEROJET	41,138 506,213		
	TOTAL	547,351	0.40	49.23
35	HONEYWELL INC HUNEYWELL FEDERAL SYSTEMS INC HONEYWELL LTD TETRA TECH DATA SYSTEMS INC	318,907 194,531 61 354		
	TOTAL	513,853	0.37	49.60
36	SCIENCE APPLICATIONS INTL CORP AMERICAN SYSTEMS ENGRG CORP FALFON ASSOCIATES SAIC ENGINEERING INC	462,922 19,819 5,843 24,842		
	TOTAL	513,426	0.37	49.98

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
37	TELEDYNE INC TELEDYNE INDUSTRIES INC	357 476,361		
	TOTAL	476,718	0.34	50.33
38	DYNCORP  AEROTHERM CORPORATION DYNCORP ITS INTERNATIONAL SERVICE GMBH SEA MOBILITY INC	452,945 1,502 829 3,685 1,284		
	TOTAL	460,245	0.33	50.66
39	OSHKOSH TRUCK CORPORATION	455,144		
	TOTAL	455,144	0.33	51.00
40	ARCO PRODUCTS COMPANY ARCO POWER TECHNOLOGY	439,406 		
	TOTAL	440,107	0.32	51.32
41	MITRE CORPORATION	436,052		
	TOTAL	436,052	0.31	51.64
42	FOUNDATION HEALTH CORPORATION	433,279		
	TOTAL	433,279	0.31	51.95
43	COMPUTER SCIENCES CORPORATION INFONET SERVICES CORPORATION	401,991 3,884		
	TOTAL	405,875	0.29	52.25
44	JOHNS HOPKINS UNIVERSITY	404,203		
	TOTAL	404,203	0.29	52.55
45	MASSACHSTTS INST OF TCHNOLOGY	401,525		
	TOTAL	401,525	0.29	52.84
46	AEROSPACE CORPORATION	<u>395,1</u> 36		
	TOTAL	395,136	0.28	53.13

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
47	WORLD ROSEN KEY AMER ETAL JV	388,552		
	TOTAL	388,552	0.28	53.41
48	COASTAL CORPORATION COASTAL EAGLE PT OIL COMPANY COASTAL FUELS MARKETING INC COASTAL MART INC COASTAL OIL NEW ENGLAND INC COASTAL OIL NEW YORK INC COASTAL REFINING & MARKETING COSCOL MARINE CORPORATION	0 122,547 2,453 3,549 89 86 251,835 4,208		
	TOTAL	384,767	0.28	53.70
49	ROYAL DUTCH SHELL GROUP OF COS SHELL CO W I LIMITED SHELL GUAM INC SHELL MARKETS MIDDLE EAST SHELL OIL COMPANY SHOWA SHELL SEIKYU K K	0 31 38,409 3,187 333,939 1,188 376,754	0.27	53.97
	TOTAL	376,754	0.27	53.97
50	HERCULES INCORPORATED	365,393		
	TOTAL	365,393	0.26	54.24
51	TENNECO INC  ALBRIGHT & WILSON AMERICAS CASE J I COMPANY MONROE AUTO EQUIPMENT COMPANY NEWPORT NEWS INDUSTRIAL CORP NEWPORT NEWS SHPBLDING DRYDOCK PACKAGING CORPORATION AMERICA SPERRY MARINE INC TENNESSEE GAS PIPELINE CO  TOTAL	363,015	0.26	54.50
52	CSX CORPORATION  AMERICAN COMMERCIAL LINES INC CSX TRANSPORTATION INC SEA LAND SERVICE INC	0 63 90 357,394		
ĺ	TOTAL	357,547	0.26	54.77
53	AVONDALE INDUSTRIES INC AVONDALE GULFPORT MARINE	341,405 2,116		
	TOTAL	343,521	0.25	55.02

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
54	PENN CENTRAL CORPORATION CAROL CABLE CO INC G & H TECHNOLOGY INC G K TECHNOLOGIES INCORPORATED MARATHON MFG COMPANIES INC VITRO CORPORATION  TOTAL	56 207 1,088 532 2,262 317,299	0.23	55.25
55	ESCO ELECTRONICS CORPORATION ELECTRONICS & SPACE CORP HAZELTINE CORPORATION RANTEC MICROWAVE & ELECTRONICS SOUTHWEST MOBILE SYSTEMS CORP VACCO INDUSTRIES  TOTAL	0 50,923 222,186 11,677 32,769 2,454 320,009	0.23	55.49
56	CFM INTERNATIONAL INC TOTAL	316,499 316,499	0.23	55.72
57	MOTOROLA INC CODEX COPPORATION MOTOROLA COMMUNICATIONS & ELEC TOTAL	290,923 9,670 12,715 313,308	0.22	55.95
58	HARRIS CORPORATION EXECUTIVE CONFERENCE-CENTER LANIER WORLDWIDE INC TOTAL	292,076 469 5,246 297,791	0.21	56.17
59	JOHNSON CONTROLS INC	297,208 2 <b>97</b> ,208	0.21	56.38
60	THIOKOL CORPORATION TOTAL	276,171 276,171	0.20	56.59
61	CHRYSLER CORPORATION CHRYSLER TECHNOLOGIES ARBRN SY ELECTROSPACE SYSTEMS INC PENTASTAR ELECTRONICS INC PENTASTAR SUPPORT SERVICES	0 137,138 85,579 44,227 82		
	TOTAL	267,026	0.19	56.78

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
62	UNAKA COMPANY INCORPORATED SOUTHERN PACKAGING & STOR CO	0 265,117		
	TOTAL	265,117	0.19	56.98
63	BOEING CO & SIKORSKY ACFT JV	256,592	:	
	TOTAL	256,592	0.18	57.16
64	MOBIL CORPORATION	255,275		
	TOTAL	255,275	0.18	57.35
65	AMOCO CORPORATION AMOCO CHEMICAL CO	233,247 4,660		
	TOTAL	237,907	0.17	57.52
66	CHEVRON CORPORATION CHEVRON INTERNATIONAL GIL CO CHEVRON U S A INC	0 86- 233,726	<b>)</b> 	
	TOTAL	233,640	0.17	57.70
67	BAHRAIN NATIONAL OIL	228,402		
	TOTAL	228,402	0.16	57.86
68	ROLLS ROYCE PLC ROLLS ROYCE INC	449- 222,016		
	TOTAL	221,567	0.16	58.02
69	AMERICAN TRANS AIR KALITTA JV	212,689		
	TOTAL	212,689	0.15	58.1 <b>8</b>
70	KAMAN CORPORATION  ELECTROMAGNETIC LAUNCH RESRCH KAMAN AEROSPACE CORPORATION KAMAN INSTRUMENTATION CORP KAMAN SCIENCES CORPORATION KAMATICS CORPORATION LOCUS INC RAYMOND ENGINEERING INC	5,884 7,541 111,311 1,165 59,720 1,485 13,563 10,843		
	TOTAL	211,512	0.15	58.33

	FISCAL YEAR 1991						
R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL			
71	SHORE MANAGEMENT INC LYKES BROS STEAMSHIP CO INC	0 0					
	TOTAL	210,445	0.15	58.49			
72	PHILIPS GLOEILAMPENFABRIEKEN AIRPAX CORPORATION ANCHOR ADVANCED PRODUCTS INC MAGNAVOX GOVT & INDUSTRL ELCTR MAGNAVOX OVERSEAS LTD NORTH AMERICAN PHILIPS CORP PHILIPS CONSUMER ELECTRONICS PHILIPS ELECTRONIC INSTRUMENTS PHILIPS MEDICAL SYS NO AMERICA	0 1,724 103 199,541 86 1,969 33 38 6,310					
	TOTAL	209,804	0.15	58.64			
73	ASTRONAUTICS CORP OF AMERICA KEARFOTT GDNCE NAVIGATION CORP	19,5 <b>4</b> 9 190,232					
	TOTAL	209,781	0.15	58.80			
74	MOTOR OILS HELLAS CORINTH REFI	209,493	0.15	58.95			
	BOOT ALLEN & HANGE TON INC						
75	BOOZ ALLEN & HAMILTON INC TOTAL	200,793	0.14	59.10			
76	BELL BOEING JV	194,431					
	TOTAL	194,431	0.14	59.24			
77	EGAG INC  EGAG ASTROPHYSICS RESCH CORP EGAG DYNATREND EGAG ELECTRONIC COMPONENTS EGAG FREQUENCY PRODUCTS EGAG GEOMETRICS INC EGAG GMBH EGAG INTERTECH EGAG MARINE INSTRUMENTS EGAG POWER SYSTEMS INC EGAG PRESSURE SCIENCE CENTER EGAG ROTRON EGAG SEALOL INC EGAG SPECIAL PROJECTS EGAG WASHINGTON ANALYTICAL SVC EGAG WRIGHT COMPONENTS INC	100,061 707 663 42 37 44 41 1,951 161 1,178 856 761 6,230 14,800 63,007 443					
	TOTAL	190,982	0.13	59.38			

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a n K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
78	NATIONAL STEEL & SHPBLDING CO	189,074		
	TOTAL	189,074	0.13	59.52
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79	BLACK & DECKER CORPORATION PRC INC	7,094 181,504		
	TOTAL	188,598	0.13	59.65
80	GENERAL ELECTRIC CO PLC THE  A B D HOLDINGS INCORPORATED CANADIAN MARCONI COMPANY CINCINNATI ELECTRONICS CORP CIRCUIT TECHNOLOGY INC G E C AVIONICS LTD G E C INCORPORATED G E C MARCONI CO LTD G E C MARCONI MATERIAL G E C PLESSEY AEROSPACE LTD G E C PLESSEY MICROSYSTEMS LTD G E C PLESSEY MICROSYSTEMS LTD G E C PLESSEY NAVAL SYSTEMS G E C PLESSEY NAVAL SYSTEMS G E C PLESSEY RESEARCH CASWELL G E C SENSORS LTD GEC FERRANTI DEF SYSTEMS INC GEC MARCONI ELECT SYS GEC PLESSEY SEMICONDUCTORS LEAR ASTRONICS CORP MARCONI CIRCUIT TECHNOLOGY MARCONI COMMAND & CTRL SYS LTD MARCONI INSTRUMENTS INC PICKER INTERNATIONAL INC	1,909 8,703 10,660 40- 23,300 9,581 1,452 2,495 749 5,240 1,080 245 603 11,111 5,243 82,716 525 2,363 36 4,977 26 12,654	0.13	59.79
81	HALLIBURTON COMPANY ALASKA CONSTRUCTORS INC BROWN & ROOT INC BROWN & ROOT INTERNATIONAL BROWN & ROOT SERVICES CORP JET RESEARCH CENTER INC NUS CORPORATION TOTAL	0 488 82,327 38,717 46,803 1,260 13,377	0.13	59.92
82	SEQUA CORPORATION ATLANTIC RESEARCH CORPORATION CHROMALLOY GAS TURBINE CORP JANUS SYSTEMS	44,327 80,195 57,345 430		

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
83	SSANGYONG OIL REFINING CO LTD	181,823		
	TOTAL	181,823	0.13	60.19
84	AMERADA HESS CORPORATION HESS OIL VIRGIN ISLANDS CORP	31,603 148,410		
	TOTAL	180,013	0.13	60.32
85	VINNELL CORPORATION	178,184		
	TOTAL	178,184	0.13	60.45
86	HENSEL PHELPS CONSTRUCTION CO	178,058		
	TOTAL	178,058	0.13	60.58
87	INTERNATIONAL SHIPHOLDING CORP CENTRAL GULF LINES INC WATERMAN STEAMSHIP CORPORATION	70,245 101,253		
	TOTAL	171,498	0.12	60.71
88	CARLYLE GROUP BDM INTERNATIONAL INC	0 167,756		
	TOTAL	167,756	0.12	60.83
89	TRACOR INC TRACOR AEROSPACE INC TRACOR APPLIED SCIENCES INC TRACOR FLIGHT SERVICES INC	31,272 31,642 96,173 4,359		
	TOTAL	163,446	0.11	60.95
90	EATON CORPORATION AMERICAN NUCLEONICS CORP EATON KENWAY INCORPORATED	160,568 1,154 269		
	TOTAL	161,991	0.11	61.07

	FISCAL YEAR IS	<del>991</del>		
R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
91	DU PONT E I DE NEMOURS & CO CONOCO INC CROSFIELD ELECTRONICS INC DU PONT DE NEMOURS DEUTSCHLAND DU PONT SPCIALTY IMAGING MEDIA REMINGTON ARMS CO INC TOTAL	15,176 59,743 961 29 1,455 80,135	0.11	61.19
92	SUN COMPANY INC  PUERTO RICO SUN OIL CO INC SUN PIPE LINE COMPANY SUN REFINING & MARKETING CO  TOTAL	52,853 612 103,234 156,699	0.11	61.30
93	AMERICAN PRESIDENT CMPNIES LTD AMERICAN PRESIDENT LINES LTD TOTAL	154,501 154,501	0.11	61.41
94	CALTEX PETROLEUM CORPORATION CALTEX OIL PHILIPPINES INC CALTEX OIL PRODUCTS COMPANY TOTAL	3,566 148,466 152,032	0.11	61.52
95	TRINITY INDUSTRIES INC TRINITY MARINE GROUP TOTAL	5,729 145,721 151,450	0.11	61.64
96	LOGICON INC EAGLE TECHNOLOGY INC R & D ASSOCIATES TOTAL	73,878 22,763 54,504 151,145	0.11	61.75
97	CAE INDUSTRIES LTD C A E ELECTRONICS LTD TOTAL	148,763 411 149,174	0.10	61.86
98	UNITED INDUSTRIAL CORPORATION A A I CORPORATION DETROIT STOKER COMPANY MANUFACTURING ASSEMBLY INC SETI INC	0 143,687 32 5,345 34		
	TOTAL	149,098	0.10	61.96

	FISCAL YEAR I	<u> </u>		
R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
99	NORFOLK SHPBLDING DRYDOCK CORP	146,048		
	TOTAL	146,048	0.10	62.07
100	MIP INSTANDSETZUNGSBETRIC	142,320		
100	TOTAL	142,320	0.10	62.18
			<u> </u>	